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(54) **METHOD AND APPARATUS FOR ALIGNING A PAIR OF DIGITAL CAMERAS FORMING A THREE DIMENSIONAL IMAGE TO COMPENSATE FOR A PHYSICAL MISALIGNMENT OF CAMERAS**

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See application file for complete search history.

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(57) **ABSTRACT**

An apparatus and method for detecting and correcting for physical misalignments of a pair of digital cameras creating a composite, three dimensional (3D) image of a target. The method involves using the distances from each of a pair of digital cameras to a target and determining correction offset values for one or the other of the images produced in the digital cameras to achieve pixel-to-pixel coincidence of the two images. The correction offset values are calculated and performed in real time and eliminate the need to physically remove a common platform on which the cameras are mounted from a mobile platform or other support structure, and to transport same to a laboratory environment for the needed calibration. Advantageously, the correction values are generated electronically and applied in real time as any misalignment between the cameras is sensed.

**14 Claims, 2 Drawing Sheets**